

CLAIMS

1. (Currently Amended) A sternum reinforcing device to be used after a sternotomy or a sternal fracture, ~~characterised in that the~~ which device comprises at least an elongated ~~modular-member~~ apt to be used as a unit of a reinforcing group, which member is designed to be located on a surface portion of an anterior longitudinal lateral edge of a sternum and is provided with a first and a second connection parts, said first connection part of said elongated ~~modular-member~~ being adapted to join with a second connection part of a preceding elongated ~~modular-member~~ of the reinforcing group along the longitudinal lateral edge of the sternum, said second connection part of said elongated ~~modular-member~~ being adapted to join with a first connection part of a following elongated ~~modular-member~~ of the group along the same longitudinal lateral edge of the sternum; ~~each said elongated modular-member~~ being further provided with a projecting portion designed to be fitted in an intercostal space adjacent to the longitudinal lateral edge of the sternum.

2. (Currently Amended) A ~~The~~ device according to claim 1, ~~characterised in that~~ wherein the connection parts of ~~the said two elongated members~~ are apt to form a prismatic coupling between them with the corresponding connection parts of the respective preceding and following elongated member of the group.

3. (Currently Amended) A ~~The~~ device according to claim 1, ~~characterised in that~~ wherein the elongated ~~modular-member~~ is made from a biocompatible, shaped and bent plate material to comprise, as a first connection part, a coupling part or male arm having a rectangular flat cross-section profile and, as a second connection part, a coupling part or female arm having a hollow channel-shaped cross-section, said coupling part or male arm being adapted to be fitted slidably in the coupling part or female arm of a preceding elongated modular member.

4. (Currently Amended) A ~~The~~ device according to claim 1, ~~characterised in that~~ wherein the said projecting portion for the intercostal space is a body portion of the elongated ~~modular-member~~ extending between said connection parts and at right angles to them and is U-shaped having parallel free edges, orthogonally bent outwards,

~~to enclose between them a clamping means of the elongated member to the same sternum.~~

5. (Currently Amended) ~~A-The~~ device according to claim 4, ~~characterised in that wherein~~ said clamping means consists of a stainless steel wire.

6. (Currently Amended) ~~A-The~~ device according to claim 4, ~~characterised in that wherein~~ said free edges of the U-shaped projecting portion extend from the projecting portion in the form of legs which can be fitted in the intercostal space of the thorax of a patient, laterally to the sternum, and bent in a mutually opposite direction, on the internal side of the thorax.

7. (Currently Amended) ~~A-The~~ device according to claim 6, ~~characterised by~~ comprising further a separated splint provided with a multiplicity of slots for the passage and the retaining of said legs before the legs being bent from the body portion in a mutually opposite direction.

8. (Currently Amended) ~~A-The~~ device according to claim 7, ~~characterised in that wherein~~ said splint is provided, on one side thereof, with guiding notches to accommodate said clamping means.

9. (New) The device according to claim 1, wherein said first connection part is a male arm adapted to be fitted slidingly in a corresponding second connection part of a preceding elongated member.

10. (New) The device according to claim 9, wherein said male arm has a rectangular flat cross-section profile.

11. (New) The device according to claim 1, wherein said second connection part is a female arm adapted to be fitted slidingly in a corresponding first connection part of a following elongated member.

12. (New) The device according to claim 11, wherein said female arm has a hollow channel-shaped cross-section

13. (New) The device according to claim 4, wherein said body portion is U-shaped having parallel free edges, orthogonally bent outwards, to enclose between them a clamping means of the elongated member to same sternum.

14. (New) A method for reinforcing a sternum after a sternotomy or a sternal fracture, comprising the step of applying a reinforcing group made of a plurality of elongated members, wherein each member is located on a surface portion of an anterior longitudinal lateral edge of the sternum and is provided with a first and a second connection parts, said first connection part of said elongated member joining with a second connection part of a preceding elongated member of the reinforcing group along the longitudinal lateral edge of the sternum, said second connection part of said elongated member joining with a first connection part of a following elongated member of the group along the same longitudinal lateral edge of the sternum, said elongated member being further provided with a projecting portion fitting in an intercostal space adjacent to the longitudinal lateral edge of the sternum.